ABSTRACT

A wafer container has an open front defined by a door receiving frame and a door sized for the door receiving frame. The door receiving frame has slots on opposite sides and the door and utilizes two latching linkages that extend, lift, lower and retract two latching portions from the edge portion of each opposite side of the door and into and out of latch receptacles on the door receiving frame. In a preferred embodiment, each latching mechanism utilizes a sliding plate with a handle connected thereto and exposed on the front of the door. The sliding plate has a pair of lifting linkages cooperating with a pair of latching linkages. Moving the handles outwardly first extends the latching portions in a first direction into the latching receptacles and then by way of a ramped cam surface and cam follower surface on the overlapping linkages, the latching portions move in a second direction normal to the first direction to pull the door inwardly and to seal the door to the container portion. The sliding plate includes a rack portion engaged with a pinion. The pinion is accessible from the front of the door by a latch key whereby the mechanism can be operated robotically. Thus a latch mechanism is provided with a non-rotating grasping handle that provides a secondary means for operating the latch. In a preferred embodiment the entire latching mechanism is exposed on the front of the door.